

Table 45. Light-Duty Vehicle Sales by Technology Type

(Thousands)

United States

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
New Car Sales 1/													
Conventional Vehicles													
Gasoline ICE Vehicles	8162.3	7726.8	7554.0	7383.1	7497.3	7564.6	7479.5	7435.0	7326.0	7198.9	7146.6	7079.3	7070.1
TDI Diesel ICE	7.0	6.0	7.7	14.8	15.7	15.4	19.6	20.0	20.2	23.7	23.6	23.6	24.3
Total Conventional	8169.3	7732.8	7561.7	7397.8	7512.9	7580.1	7499.1	7455.0	7346.2	7222.6	7170.2	7102.9	7094.4
Alternative-Fuel Vehicles													
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	390.4	364.4	357.0	338.6	347.1	350.8	434.3	432.4	424.3	497.2	494.4	490.9	490.4
Ethanol ICE	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9
Electric Vehicle	2.5	2.3	2.2	2.1	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.8	29.5	52.9	55.1
Electric-Gasoline Hybrid	13.4	19.7	40.0	229.9	244.0	257.5	270.0	280.9	354.4	349.7	416.2	413.1	424.1
CNG ICE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CNG Bi-fuel	12.1	11.2	10.8	10.5	12.3	12.3	11.9	11.6	11.2	11.0	10.9	10.8	10.8
LPG ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LPG Bi-fuel	46.3	42.9	41.1	40.2	40.6	40.1	39.2	38.1	37.0	35.9	36.0	35.7	35.8
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Total Alternatives	465.4	441.2	451.8	622.1	646.9	663.6	758.2	765.9	829.8	925.4	989.9	1006.4	1020.1
Percent Alternative Car Sales	5.39	5.40	5.64	7.76	7.93	8.05	9.18	9.32	10.15	11.36	12.13	12.41	12.57
Total New Car Sales	8634.7	8174.1	8013.5	8019.9	8159.9	8243.7	8257.3	8220.9	8175.9	8148.0	8160.1	8109.3	8114.5
New Light Truck Sales 2/													
Conventional Vehicles													
Gasoline ICE Vehicles	6992.4	7121.2	6825.9	6938.2	6969.0	7143.0	6982.1	7040.6	7088.7	7123.8	7255.3	7355.9	7498.8
TDI Diesel ICE	328.6	309.1	349.3	553.4	568.9	565.7	567.1	582.4	602.2	692.0	693.1	698.4	723.8
Total Conventional	7321.0	7430.3	7175.2	7491.5	7537.9	7708.7	7549.2	7623.0	7690.9	7815.8	7948.4	8054.2	8222.6
Alternative-Fuel Vehicles													
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	340.7	349.1	340.6	361.8	391.2	401.3	683.3	689.4	693.9	697.9	713.4	726.0	742.5
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	3.3	3.4	3.3	3.5	4.0	4.5	4.5	4.5	5.1	5.2	5.2	6.3	5.9
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric-Gasoline Hybrid	0.0	0.0	0.0	167.5	316.8	335.8	334.2	346.2	358.4	370.1	386.4	401.2	419.6
CNG ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CNG Bi-fuel	30.8	31.2	30.2	32.2	33.1	33.9	34.4	34.8	35.1	35.7	36.3	36.9	37.7
LPG ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LPG Bi-fuel	102.3	103.9	100.3	107.1	110.1	112.8	114.4	115.6	116.8	118.6	120.8	122.6	125.3
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.4	1.0
Total Alternatives	477.1	487.6	474.4	672.1	855.3	888.4	1170.9	1190.6	1210.5	1228.7	1263.2	1295.5	1332.2
Percent Alternative Light Truck Sales	6.12	6.16	6.20	8.23	10.19	10.33	13.43	13.51	13.60	13.59	13.71	13.86	13.94
Total New Truck Sales	7798.2	7917.9	7649.7	8163.6	8393.3	8597.1	8720.1	8813.6	8901.4	9044.5	9211.7	9349.7	9554.7

Table 45. Light-Duty Vehicle Sales by Technology Type
(Thousands)
United States

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Percent Total Alternative Sales	5.74	5.77	5.91	8.00	9.08	9.22	11.36	11.49	11.95	12.53	12.97	13.18	13.31
EPACT Legislative Alternative Sales	265.29	262.88	253.49	264.77	270.07	274.25	275.90	276.46	276.82	278.69	282.89	285.95	291.04
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	89.57	134.91	135.93	136.30	191.17	192.29	187.22	257.60	232.30
Total Vehicles Sales	16432.9	16092.0	15663.2	16183.6	16553.1	16840.7	16977.4	17034.4	17077.4	17192.5	17371.8	17459.0	17669.3

Table 45. Light-Duty Vehicle Sales by Technology Type

(Thousands)

United States	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2002-2025
New Car Sales 1/													
Conventional Vehicles													
Gasoline ICE Vehicles	7024.4	6991.0	7030.5	7104.4	7171.0	7208.5	7231.5	7173.2	7165.4	7183.5	7213.3	7246.4	-0.3%
TDI Diesel ICE	24.4	24.9	25.7	26.7	27.6	28.7	29.8	30.6	31.8	33.0	35.0	37.1	8.2%
Total Conventional	7048.8	7015.9	7056.2	7131.1	7198.6	7237.3	7261.4	7203.8	7197.2	7216.5	7248.3	7283.6	-0.3%
Alternative-Fuel Vehicles													
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.7%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	487.2	483.6	485.5	489.8	493.3	494.4	494.5	488.4	486.4	486.9	488.4	490.3	1.3%
Ethanol ICE	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	3.9%
Electric Vehicle	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	-0.3%
Electric-Diesel Hybrid	68.4	70.3	71.1	71.9	72.4	73.1	73.5	73.2	73.2	73.0	73.8	74.4	N/A
Electric-Gasoline Hybrid	427.5	436.9	440.6	446.5	451.7	454.5	455.9	451.2	450.3	451.1	452.6	454.0	14.6%
CNG ICE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-0.5%
CNG Bi-fuel	10.7	10.7	10.7	10.9	11.0	11.1	11.1	11.0	11.0	11.1	11.1	11.2	0.0%
LPG ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
LPG Bi-fuel	35.6	35.5	35.7	36.1	36.5	36.7	36.8	36.5	36.4	36.5	36.7	36.9	-0.7%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.7	1.6	1.9	1.9	3.8	3.7	3.7	3.9	3.9	4.1	4.7	4.8	N/A
Total Alternatives	1033.1	1041.8	1048.8	1060.5	1072.1	1076.8	1079.0	1067.6	1064.8	1066.3	1071.0	1075.5	3.9%
Percent Alternative Car Sales	12.78	12.93	12.94	12.95	12.96	12.95	12.94	12.91	12.89	12.87	12.87	12.87	3.8%
Total New Car Sales	8081.9	8057.7	8105.0	8191.6	8270.7	8314.1	8340.4	8271.4	8262.0	8282.8	8319.3	8359.0	0.1%
New Light Truck Sales 2/													
Conventional Vehicles													
Gasoline ICE Vehicles	7587.6	7666.4	7822.2	8014.4	8215.8	8373.9	8516.4	8568.2	8682.5	8851.7	9030.2	9243.7	1.1%
TDI Diesel ICE	728.3	740.3	763.3	788.2	809.8	837.2	861.3	873.3	892.8	908.2	944.0	977.9	5.1%
Total Conventional	8316.0	8406.7	8585.5	8802.6	9025.6	9211.1	9377.7	9441.5	9575.3	9759.9	9974.2	10221.7	1.4%
Alternative-Fuel Vehicles													
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	753.1	761.8	780.6	805.2	832.5	853.6	872.2	878.5	894.3	917.7	942.7	970.8	4.5%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	5.7	7.6	8.1	8.3	12.6	12.3	12.2	12.4	12.3	12.2	13.1	13.1	6.1%
Electric-Diesel Hybrid	0.0	23.8	24.6	36.3	37.4	38.6	67.0	67.8	69.2	70.4	72.8	74.9	N/A
Electric-Gasoline Hybrid	434.4	435.5	445.2	451.5	463.6	473.2	467.7	470.8	477.5	486.8	497.1	508.2	N/A
CNG ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7%
CNG Bi-fuel	38.2	38.7	39.5	40.6	41.6	42.5	43.4	43.6	44.3	45.2	46.2	47.3	1.8%
LPG ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.0%
LPG Bi-fuel	126.9	128.6	131.4	134.9	138.5	141.4	144.1	145.1	147.2	150.1	153.5	157.4	1.8%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.8	2.0	2.1	2.2	4.4	4.2	4.0	4.0	3.8	3.5	3.7	3.4	N/A
Total Alternatives	1359.2	1398.1	1431.6	1479.0	1530.7	1565.8	1610.7	1622.3	1648.7	1686.1	1729.2	1775.3	5.8%
Percent Alternative Light Truck Sales	14.05	14.26	14.29	14.38	14.50	14.53	14.66	14.66	14.69	14.73	14.78	14.80	3.9%
Total New Truck Sales	9675.2	9804.8	10017.1	10281.6	10556.3	10776.9	10988.4	11063.8	11224.0	11446.0	11703.4	11997.0	1.8%

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(Thousands)
United States

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2002- 2025
Percent Total Alternative Sales	13.47	13.66	13.69	13.75	13.83	13.84	13.92	13.91	13.93	13.95	13.99	14.00	3.9%
EPACT Legislative Alternative Sales	293.79	296.82	302.38	309.49	316.81	322.55	327.94	329.33	333.22	338.83	345.43	352.94	1.3%
ZEVP Legislative Alternative Sales	212.08	319.78	338.61	348.61	497.03	488.51	486.58	490.24	489.87	483.90	514.47	514.54	N/A
Total Vehicles Sales	17757.1	17862.5	18122.2	18473.2	18827.0	19091.0	19328.8	19335.2	19486.0	19728.7	20022.8	20356.0	1.0%

Table 45. Light-Duty Vehicle Sales by Technology Type
(Thousands)
United States

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2002 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1998, http://www.eia.doe.gov/cneaf/alt_trans98/table1.html; and EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e. Projections: EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e.